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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,173	08/23/2001	Henry M. Israel	1093NES-US	1648

7590

07/16/2003

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EXAMINER

THALER, MICHAEL H

ART UNIT

PAPER NUMBER

3731

DATE MAILED: 07/16/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

EC

# Office Action Summary

Application No.

09/935,173

Applicant(s)

ISRAEL, HENRY M.

Examiner

Michael Thaler

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

Art Unit: 3731

Claims 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis for "said at least one of a meshwork and coils".

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yachia et al. (5,246,445). Yachia et al. disclose a stent assembly for use in a blood vessel (col. 2, lines 65-67) comprising an upstream portion (for example, the converging, right

Art Unit: 3731

portion of the left bulge 2 shown in figure 1b) inherently adapted to modify a flow characteristic of embolic material disposed in the blood stream (This portion inherently modifies a flow characteristic of embolic material disposed in the blood stream since, like the convergence 24 of applicant's invention, it converges along the flow path of the stent, reducing the cross-sectional area of the lumen.) and a downstream portion (for example, the right bulge 2 shown in figure 1b) inherently comprising a trapping region for trapping embolic material (This portion inherently traps embolic material since, like the trapping region 22 of applicant's invention, it diverges along the flow path of the stent to allow the embolic material to remain in the divergent region or bulge. Alternatively, it would have been obvious that the Yachia et al. stent assembly performs these functions for the reasons set forth above. As to claim 2, the upstream portion may be considered to be the right portion of the left bulge 2 as well as the narrow portion between bulges 2 as shown in figure 1b.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yachia et al. (5,246,445) in view of St. Germain (5,836,966). Yachia et al. fail to disclose the coverage and thickness of the coils varying along an axial portion of the stent assembly. However, St. Germain teaches that the coverage and thickness of stent coils should be varied along an axial portion

Art Unit: 3731

thereof, in order to vary the outward force along the length of the stent to provide more force in the portion of the blood vessel where it is needed (abstract). It would have been obvious to vary the coverage and thickness of the Yachia et al. coils along an axial portion of the stent assembly so that it too would have this advantage.

Claims 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yachia et al. (5,246,445). As to claim 14, Yachia et al. fail to disclose a restrictor element. However, it is well known in this art to provide restrictor elements to stents so that the expansion of the stent is precisely and automatically limited. It would have been obvious to include a restrictor element in the Yachia et al. stent so that it too would have this advantage. As to claims 15-18, Yachia et al. fail to disclose anti-thrombogenic or friction enhancing and reducing agents. However, it is well known in this art to provide stents with these agents 1) so that they are biocompatible, 2) so that they can be positively secured to blood vessels and 3) to reduce trauma on the blood. It would have been obvious to include these agents on the Yachia et al. stent so that it too would have these advantages. As to claim 19, Yachia et al. fail to disclose a space between the downstream portion and the upstream portion to allow blood to flow therethrough into a side branch of the blood vessel. However, it is well known in this art to provide stents with spaces or openings

Art Unit: 3731

to allow to allow blood to flow therethrough into a side branch of the blood vessel. It would have been obvious to provide such an opening or space in the Yachia et al. stent so that it too would have this advantage.

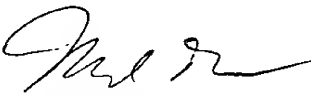
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (703) 308-2981. The examiner can normally be reached Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Milano can be reached on (703)308-2496. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3590 for regular communications and (703)305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0858.

mht  
July 15, 2003

  
MICHAEL THALER  
PRIMARY EXAMINER  
ART UNIT 3731